AMENDMENTS

In the claims:

1. (Currently Amended) A method of detecting a breast cancer-associated transcript in a cell from a patient, the method comprising contacting a biological sample from the patient with a polynucleotide that selectively hybridizes to a sequence ~~at least 80%~~ identical to SEQ ID NO:5, or a polymorphic variant, allelic variant, mutant, interspecies homolog, or conservatively modified variant sequence at least 95% identical to SEQ ID NO:5~~a sequence as shown in Tables 1-25~~.

2. (Currently Amended) The method of claim 1, wherein the biological sample comprises ~~isolated~~ nucleic acids.

3. (Original) The method of claim 2, wherein the nucleic acids are mRNA.

4. (Original) The method of claim 2, further comprising the step of amplifying nucleic acids before the step of contacting the biological sample with the polynucleotide.

5. (Currently Amended) The method of claim 1, wherein the polynucleotide comprises a sequence ~~as shown in Tables 1-25~~complementary to a subsequence of SEQ ID NO:5.

6. (Original) The method of claim 1, wherein the polynucleotide is immobilized on a solid surface.

7. (Original) The method of claim 1, wherein the patient is undergoing a therapeutic regimen to treat breast cancer.

8. (Original) The method of claim 1, wherein the patient is suspected of having breast cancer.

9. (Withdrawn) An isolated nucleic acid molecule consisting of a polynucleotide sequence as shown in Tables 1-25.

10. (Withdrawn) The nucleic acid molecule of claim 9, which is labeled.

11. (Withdrawn) An expression vector comprising the nucleic acid of claim 9.

12. (Withdrawn) A host cell comprising the expression vector of claim 11.

13. (Withdrawn) An isolated polypeptide which is encoded by a nucleic acid molecule having polynucleotide sequence as shown in Tables 1-25.

14. (Withdrawn) An antibody that specifically binds a polypeptide of claim 13.

15. (Withdrawn) The antibody of claim 14, further conjugated to an effector component.

16. (Withdrawn) The antibody of claim 15, wherein the effector component is a fluorescent label.

17. (Withdrawn) The antibody of claim 15, wherein the effector component is a radioisotope or a cytotoxic chemical.

18. (Withdrawn) The antibody of claim 15, which is an antibody fragment.

19. (Withdrawn) The antibody of claim 15, which is a humanized antibody

20. (Withdrawn) A method of detecting a breast cancer cell in a biological sample from a patient, the method comprising contacting the biological sample with an antibody of claim 14.

21. (Withdrawn) The method of claim 20, wherein the antibody is further conjugated to an effector component.

22. (Withdrawn) The method of claim 21, wherein the effector component is a fluorescent label.

23. (Withdrawn) A method for identifying a compound that modulates a breast cancer-associated polypeptide, the method comprising the steps of:

(i) contacting the compound with a breast cancer-associated polypeptide, the polypeptide encoded by a polynucleotide that selectively hybridizes to a sequence at least 80% identical to a sequence as shown in Tables 1-25; and

(ii) determining the functional effect of the compound upon the polypeptide.

24. (Withdrawn) A drug screening assay comprising the steps of

(i) administering a test compound to a mammal having breast cancer or a cell isolated therefrom;

(ii) comparing the level of gene expression of a polynucleotide that selectively hybridizes to a sequence at least 80% identical to a sequence as shown in Tables 1-25 in a treated cell or mammal with the level of gene expression of the polynucleotide in a control cell or mammal, wherein a test compound that modulates the level of expression of the polynucleotide is a candidate for the treatment of breast cancer.

25. (New) A method of diagnosing breast cancer in a patient, the method comprising:

(i) obtaining a biological sample from the patient; and

(ii) detecting the level of a polynucleotide in the sample, wherein the polynucleotide is an RNA equivalent of a nucleic acid sequence identical to SEQ ID NO:5, or a polymorphic variant, allelic variant, mutant, interspecies homolog, or conservatively modified variant sequence at least 95% identical to SEQ ID NO:5, and wherein an increase in the level of the polynucleotide relative to a normal biological sample is indicative of breast cancer.

26. (New) The method of claim 25, wherein the method further comprises isolating nucleic acids from the sample.

27. (New) The method of claim 25, wherein the detecting step comprises hybridizing a labeled probe to the polynucleotide.

28. (New) The method of claim 27, wherein the probe is labeled with a fluorescent label.

28. (New) The method of claim 25, wherein the detecting step comprises hybridizing the polynucleotide to a probe that is immobilized on a solid surface.

29. (New) The method of claim 25, wherein the detecting step comprises contacting the sample with a biochip, wherein the biochip comprises the nucleic acid sequence disclosed in SEQ ID NO:5.

30. (New) A method of monitoring breast cancer in a patient, the method comprising:

(i) detecting the level in said patient of an expression product of a gene encoded by a nucleic acid sequence identical to SEQ ID NO:5, or a polymorphic variant, allelic variant, mutant, interspecies homolog, or conservatively modified variant sequence at least 95% identical to SEQ ID NO:5;

(ii) comparing the level of said expression product in said human with the level of said expression product in a normal patient.

31. (New) The method of claim 30 wherein said expression product is mRNA.

32. (New) The method of claim 31 wherein said detecting step comprises hybridizing a polynucleotide probe to said mRNA, wherein said probe is complementary to said mRNA.

33. (New) The method of claim 32 wherein said polynucleotide probe is labeled.

34. (New) The method of claim 31 wherein said label is a fluorescent label.

35. (New) The method of claim 30 wherein said expression product is a polypeptide.

36. (New) The method of claim 35 wherein said detecting step comprises contacting said polypeptide with an antibody that binds to said polypeptide.

37. (New) The method of claim 36 wherein said antibody further comprises a label.